

ABSTRACT OF THE DISCLOSURE

An indoor local area network (LAN) system using an ultra wide-band (UWB) communication system is provided. The indoor LAN system includes at least one remote terminal including a UWB module for converting input digital data to be transmitted into an analog signal of an ultra wide-bandwidth and wirelessly transmitting the converted analog signal via an antenna of the remote terminal. The UWB module receives an analog signal of the ultra wide-bandwidth via the antenna and converts the received analog signal into a digital signal. The indoor LAN system further includes at least one access point for performing USB-based wireless communication with the remote terminal in a corresponding area. The access point is adapted to receive the analog signal of the ultra wide-bandwidth transmitted from the remote terminal and convert the received analog signal into an optical signal